

Module Main.cpp

Main.cpp_1(2)

/* This is the System mainline. A
configuration file is read and if
successful, services are started. */

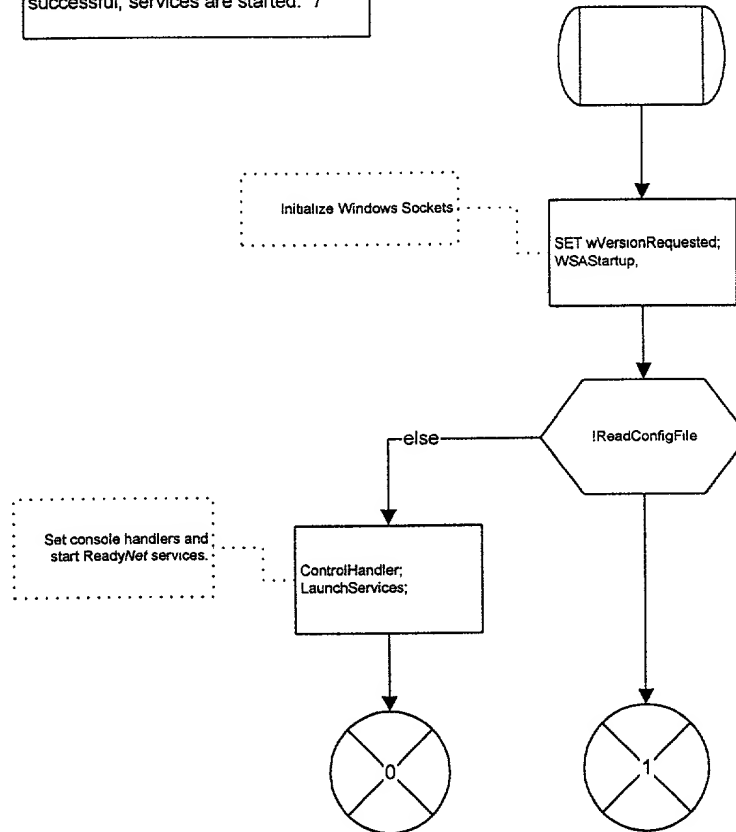


Figure 1

Module Handlers.cpp

handlers.cpp_1(10)

FUNCTION
getDestIp

/* Retrieves the destination address
from the client table using source IP
and port number */

src_ip
src_port

GET entry from client
table,
GET connection info from
table entry,

Based on source IP
address and port number,
retrieve the destination IP
address from the client
connection table.

conn_entry ==
NULL

else

dst_ip

FAILURE

Figure 2

FUNCTION
connectToHost

/* Uses Windows sockets to
connect to a particular IP address
and port */

ip
port

sock = w_socket

sock ==
INVALID_
SOCKET

else

rc=w_connect

rc ==
SOCKET_ERROR

else

sock

FAILURE

FAILURE

Figure 3

Module Handlers.cpp

handlers.cpp_2(10)

FUNCTION
proxyMessage

/* Read data packet from the source
socket and direct it to the destination
socket */

Figure 4

src_sock
dst_sock

receive src_sock

send dst_sock

FAILURE

FUNCTION
dataHandler

/* Checks for network traffic on
the client-side and server-side
and passes these messages to
the call proxyMessage */

Figure 5

param

client socket
event?

Yes

proxyMessage
(client -> server)

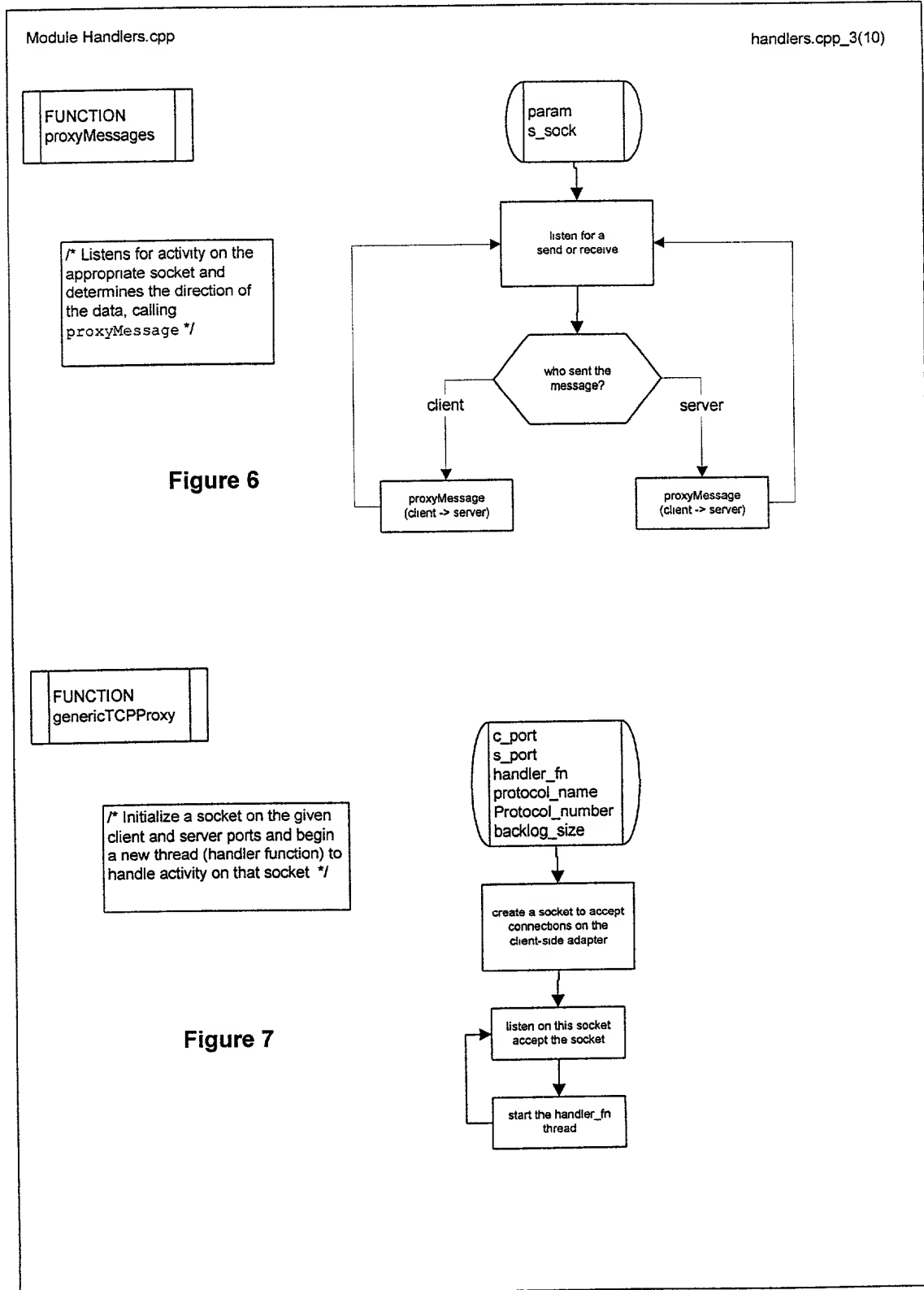
Yes

server socket
event?

proxyMessage
(server -> client)

sockets still
open?

No



Module arpspoof.cpp

arpspoof.cpp_1(5)

FUNCTION
RnetArpSpoof

/* Handles any ARP requests by
waiting for an ARP packet,
responding with the System
client-side IP address, and
inserting the client into the
routeTable */

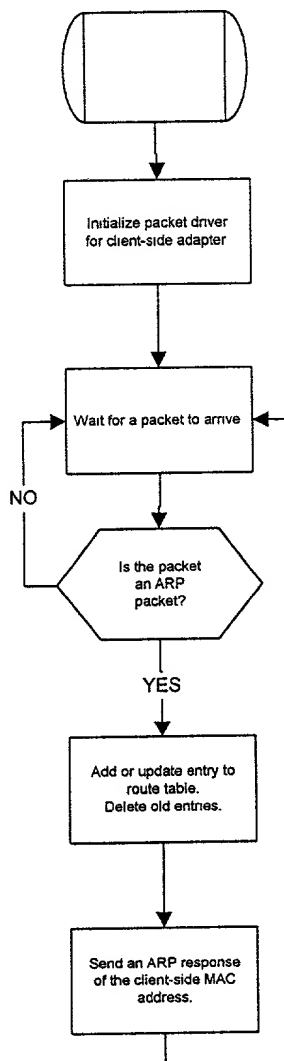
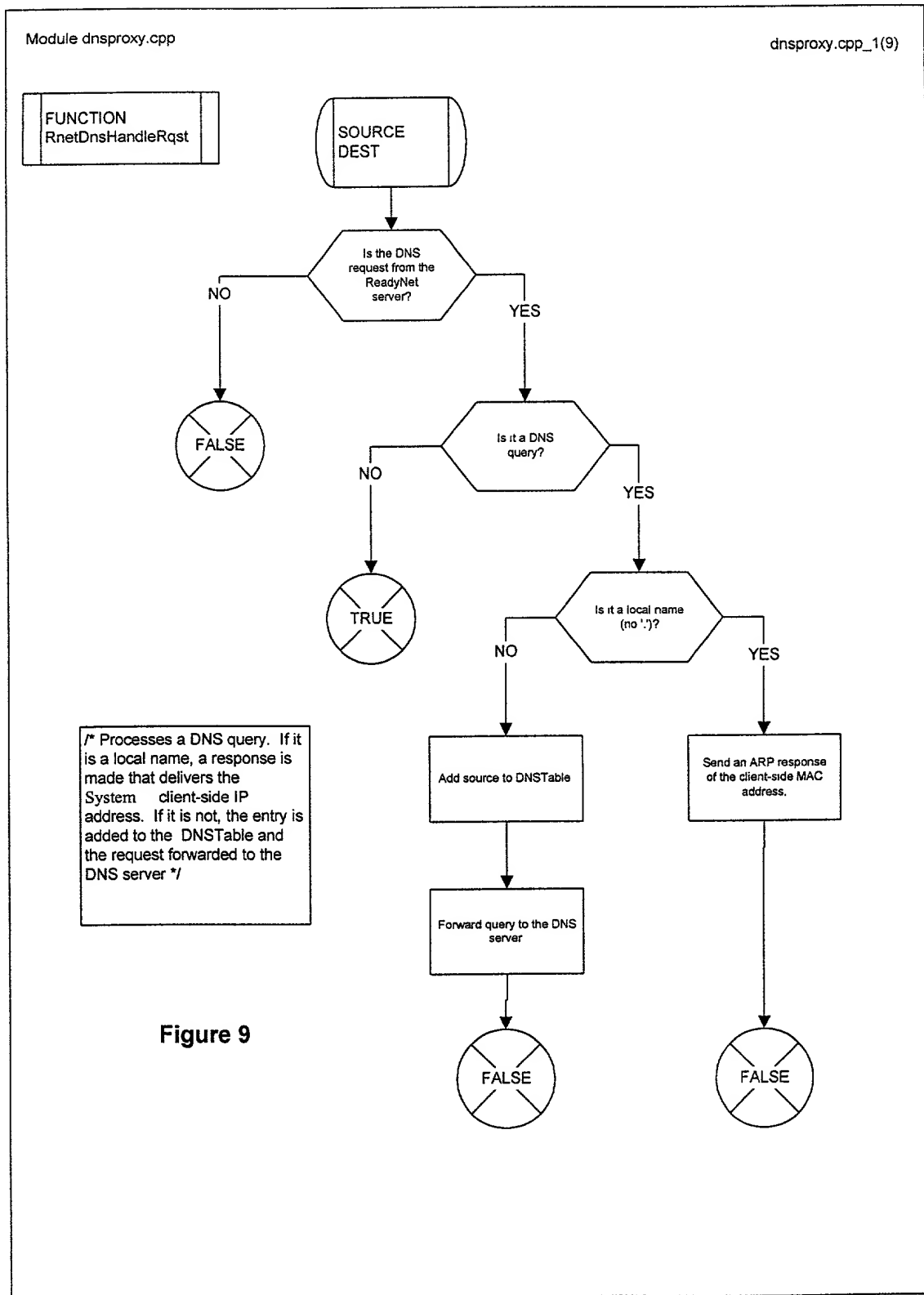
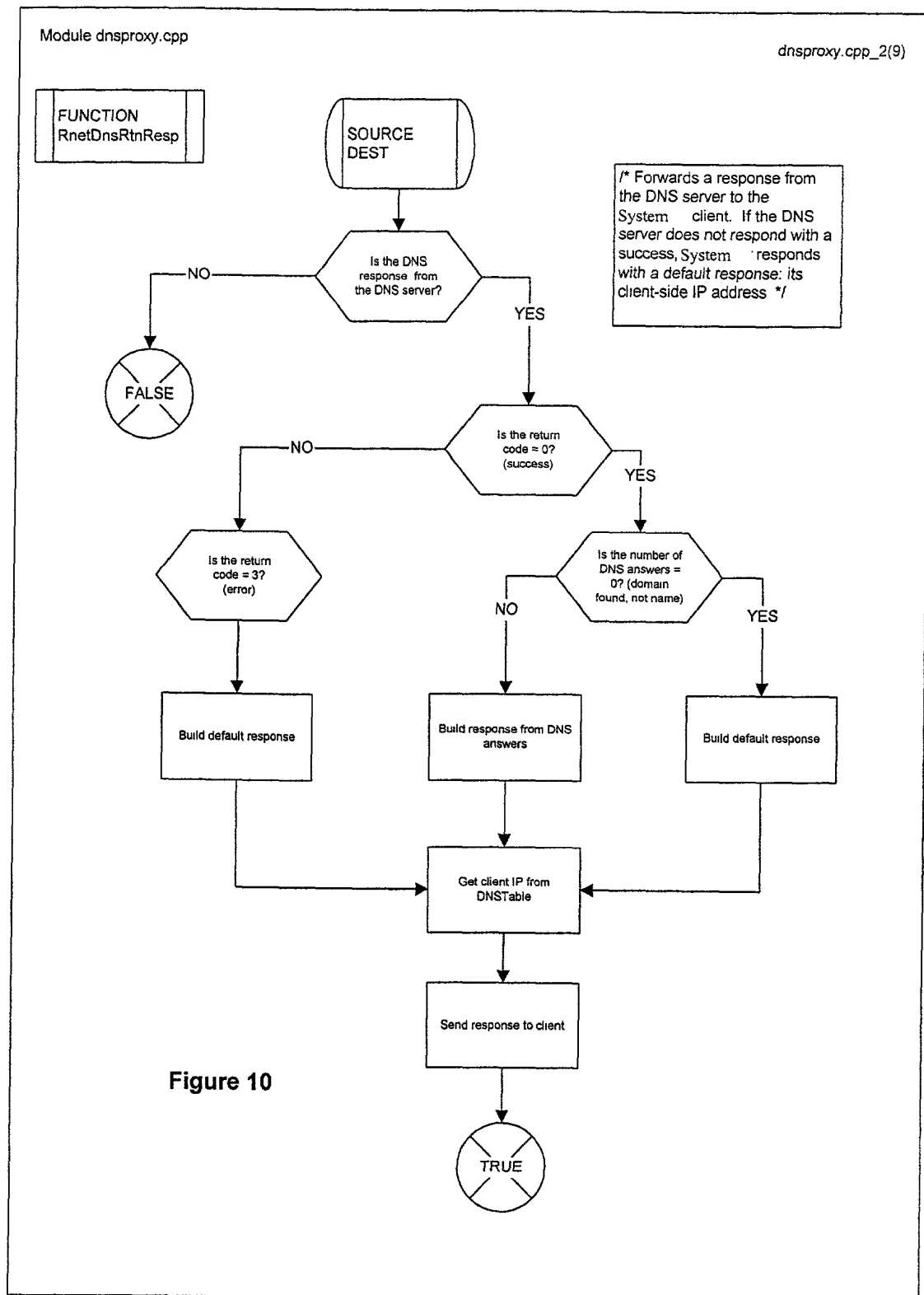


Figure 8



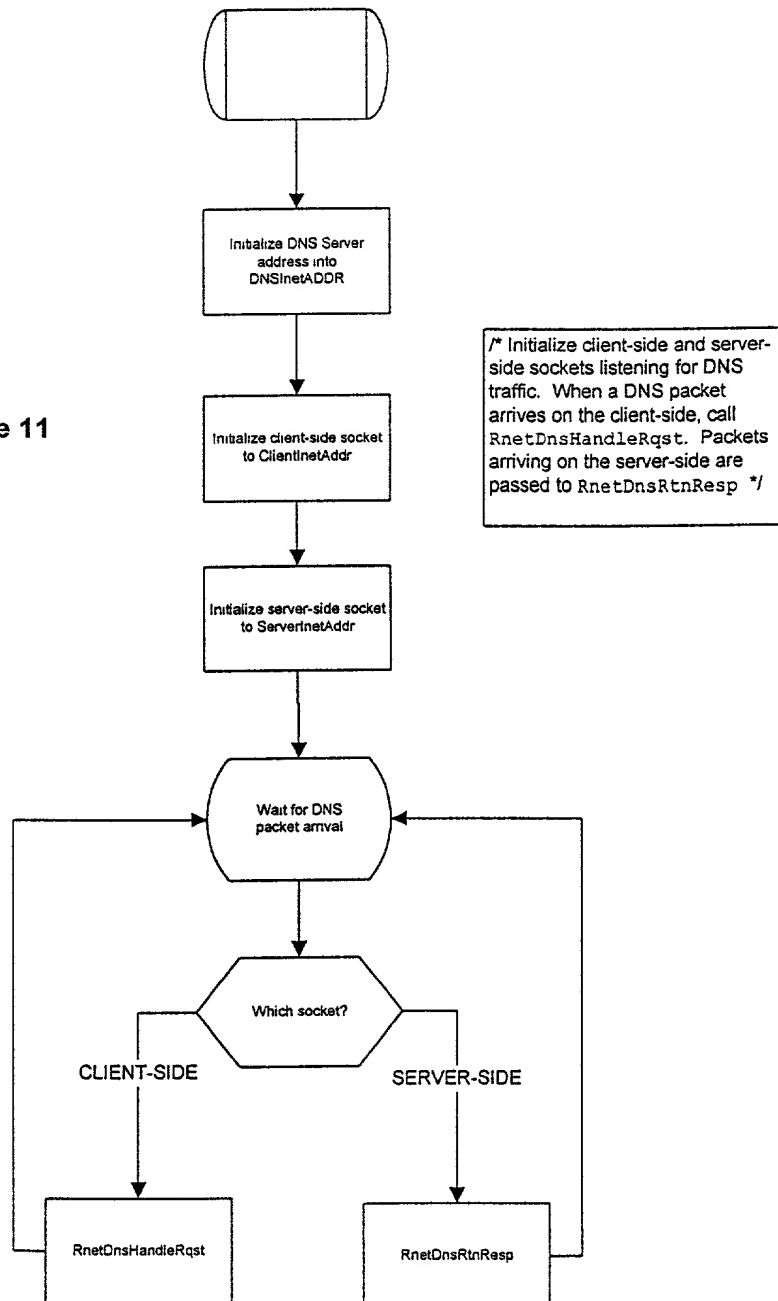


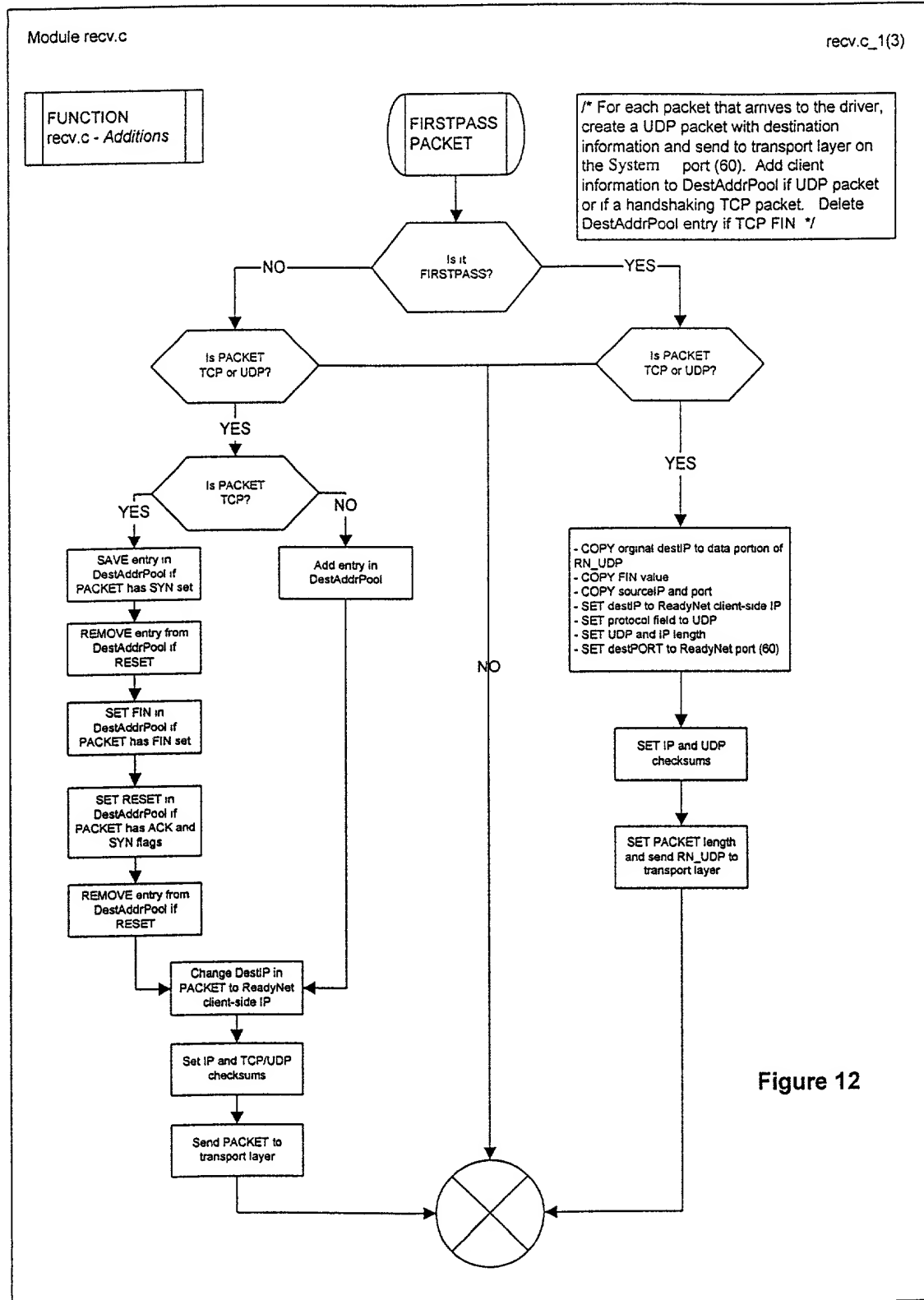
Module dnsproxy.cpp

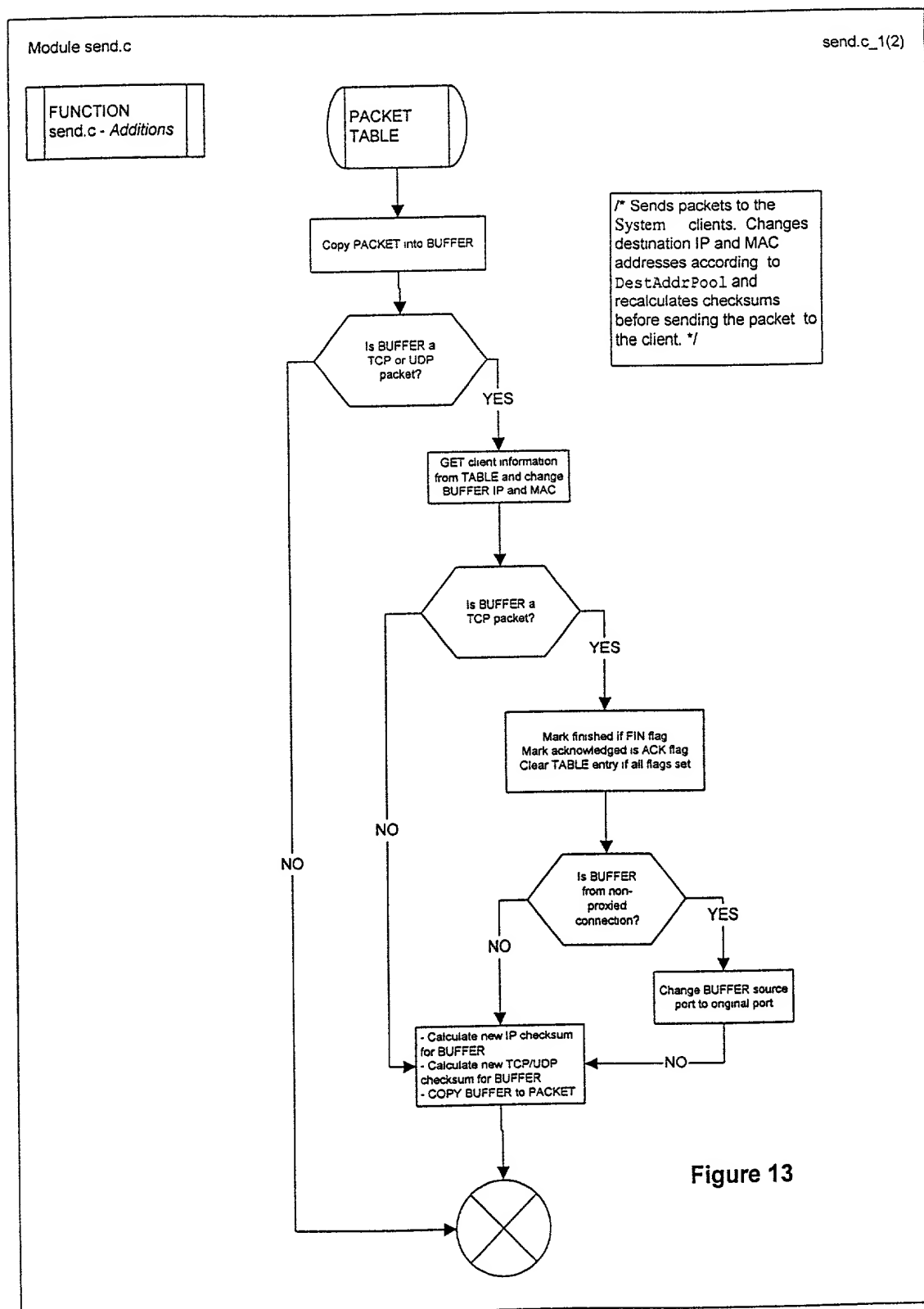
dnsproxy.cpp_3(9)

FUNCTION
 RnetDnsProxy

Figure 11







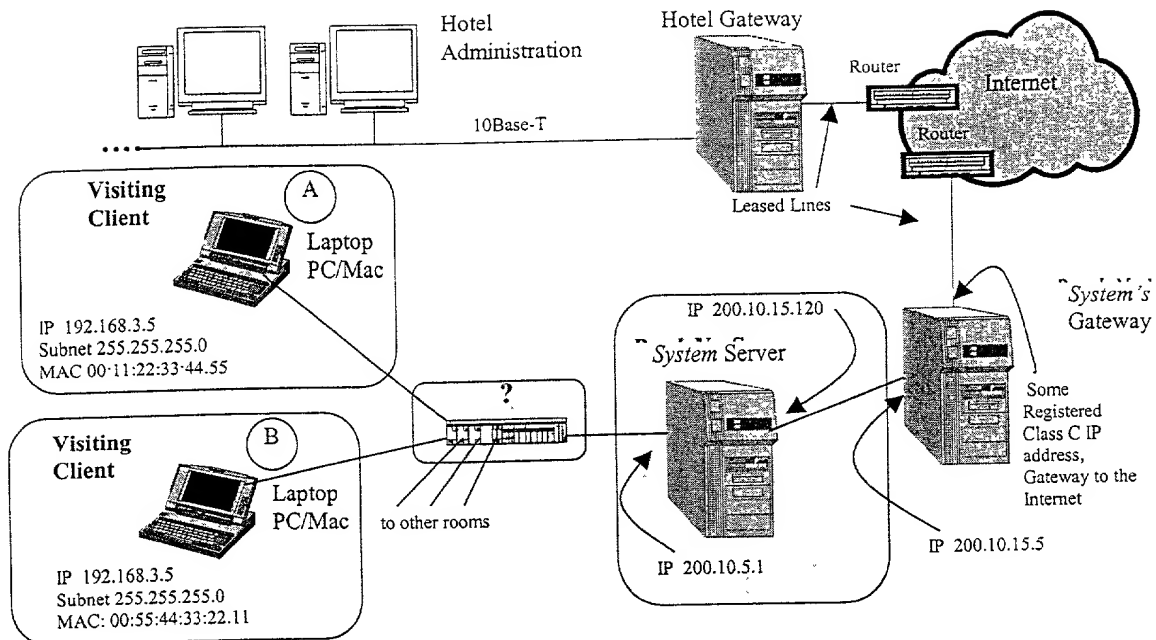


Figure 14

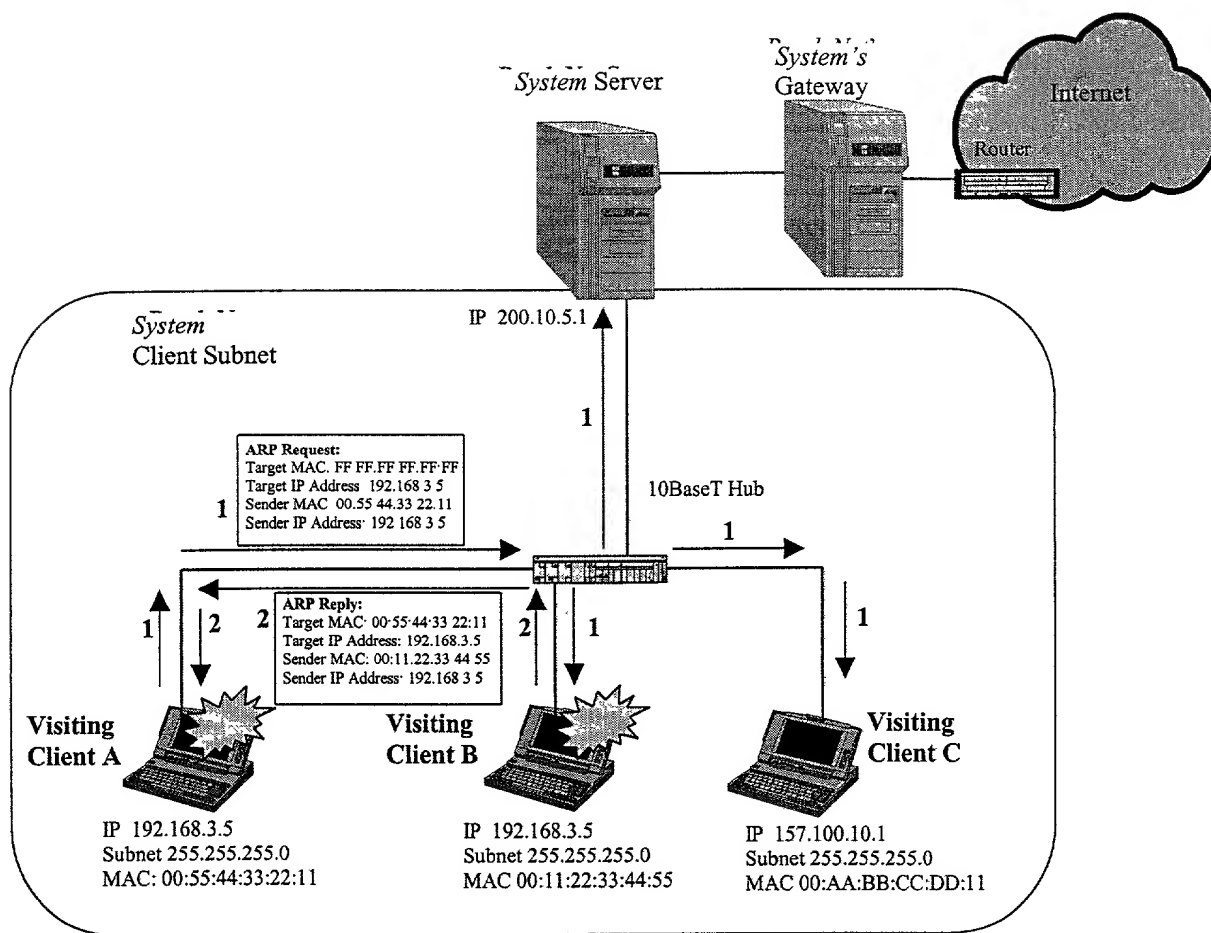


Figure 15

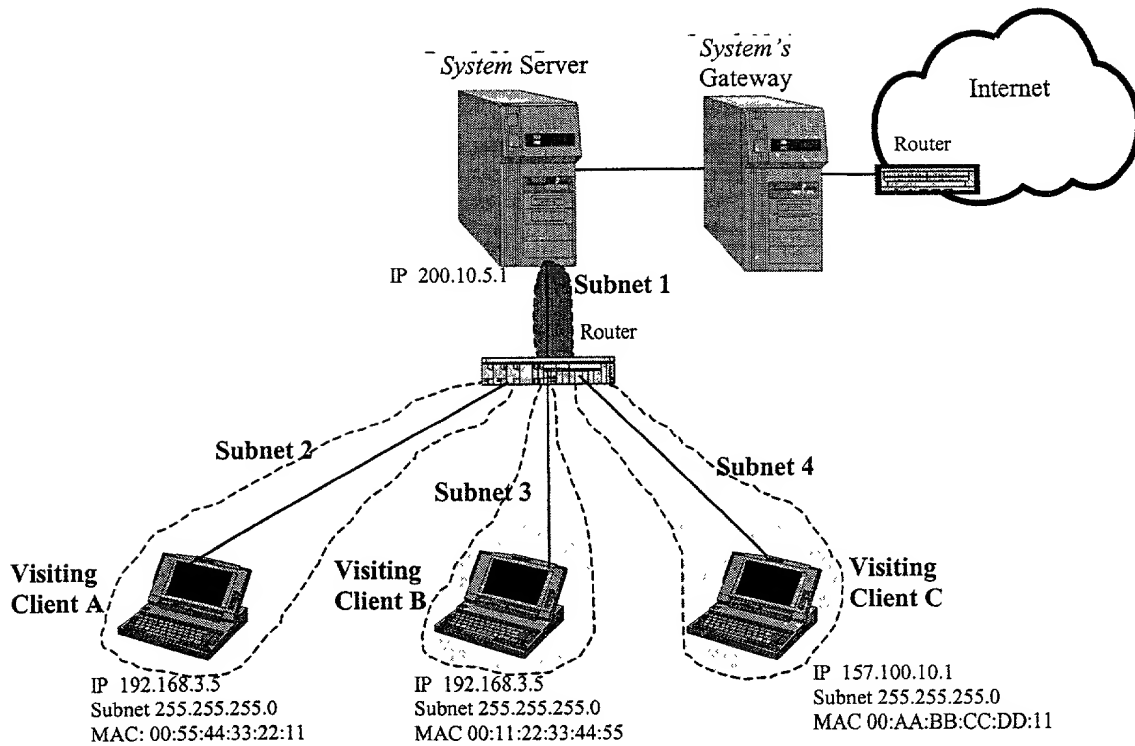


Figure 16

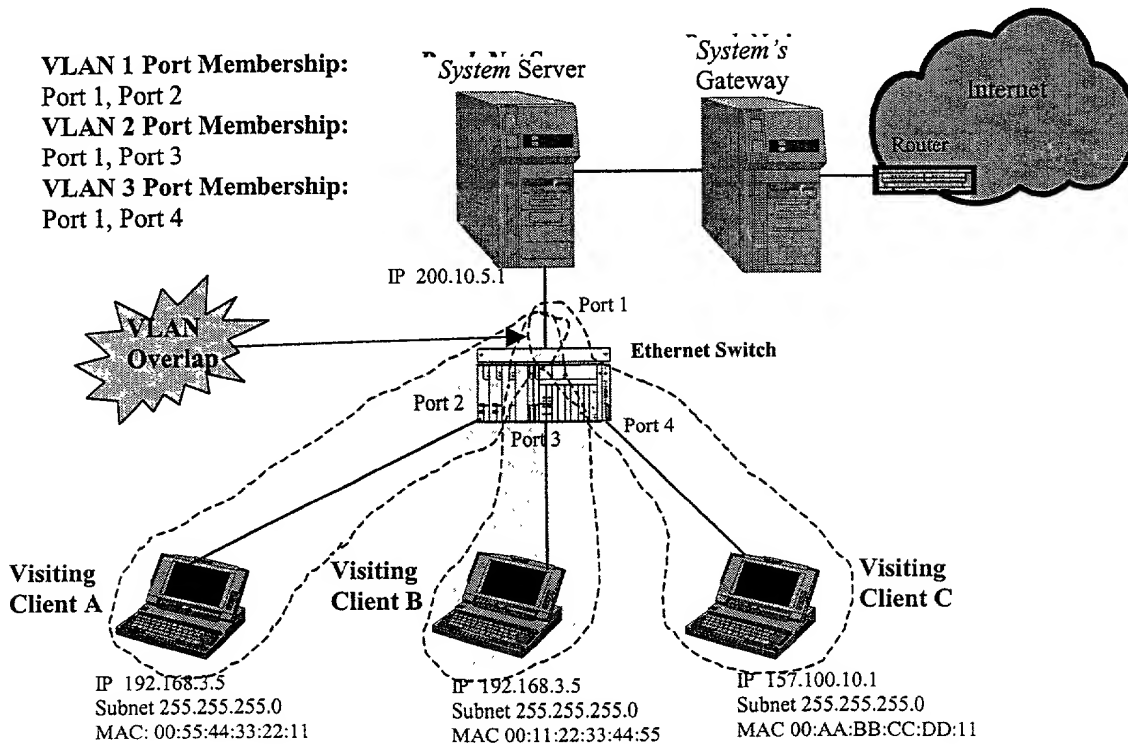


Figure 17

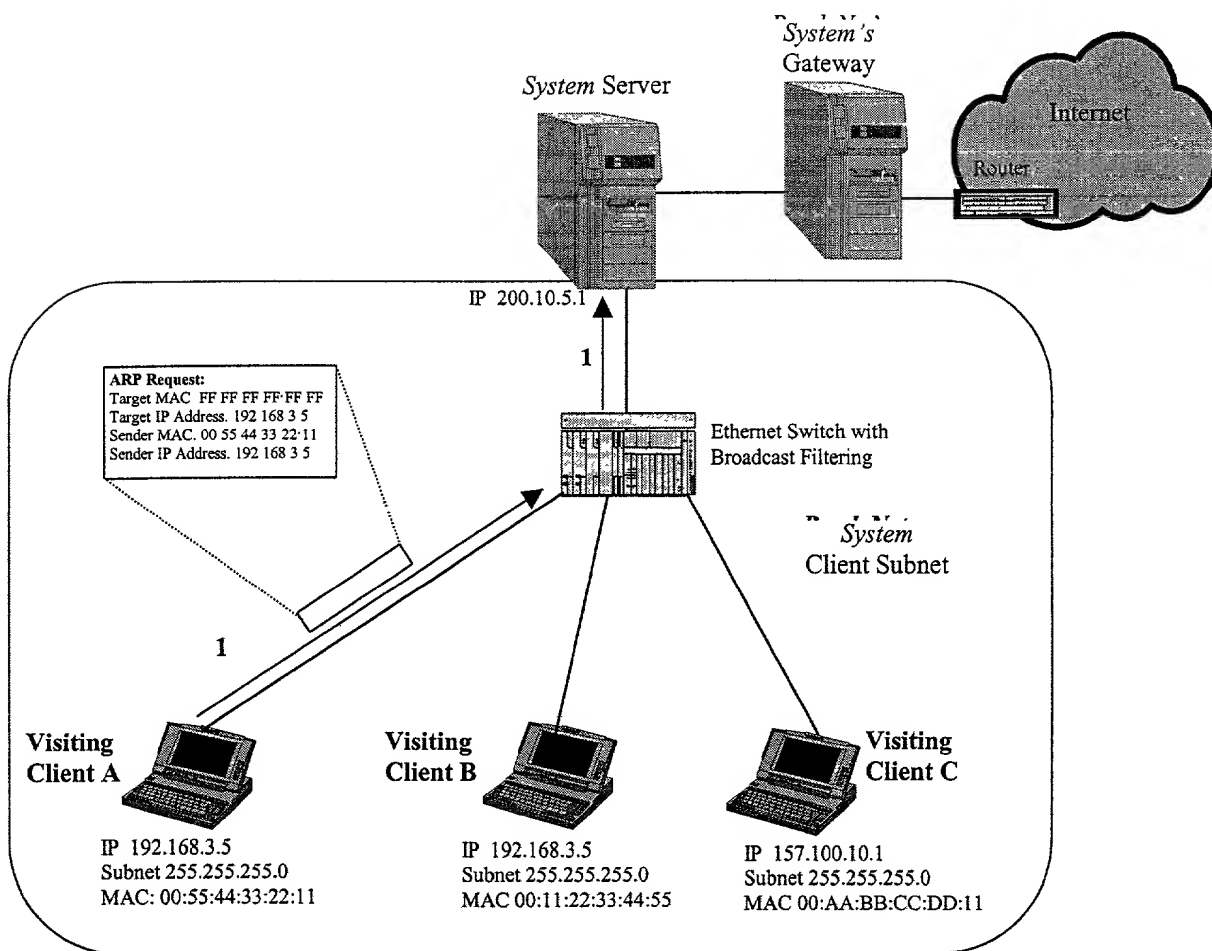


Figure 18

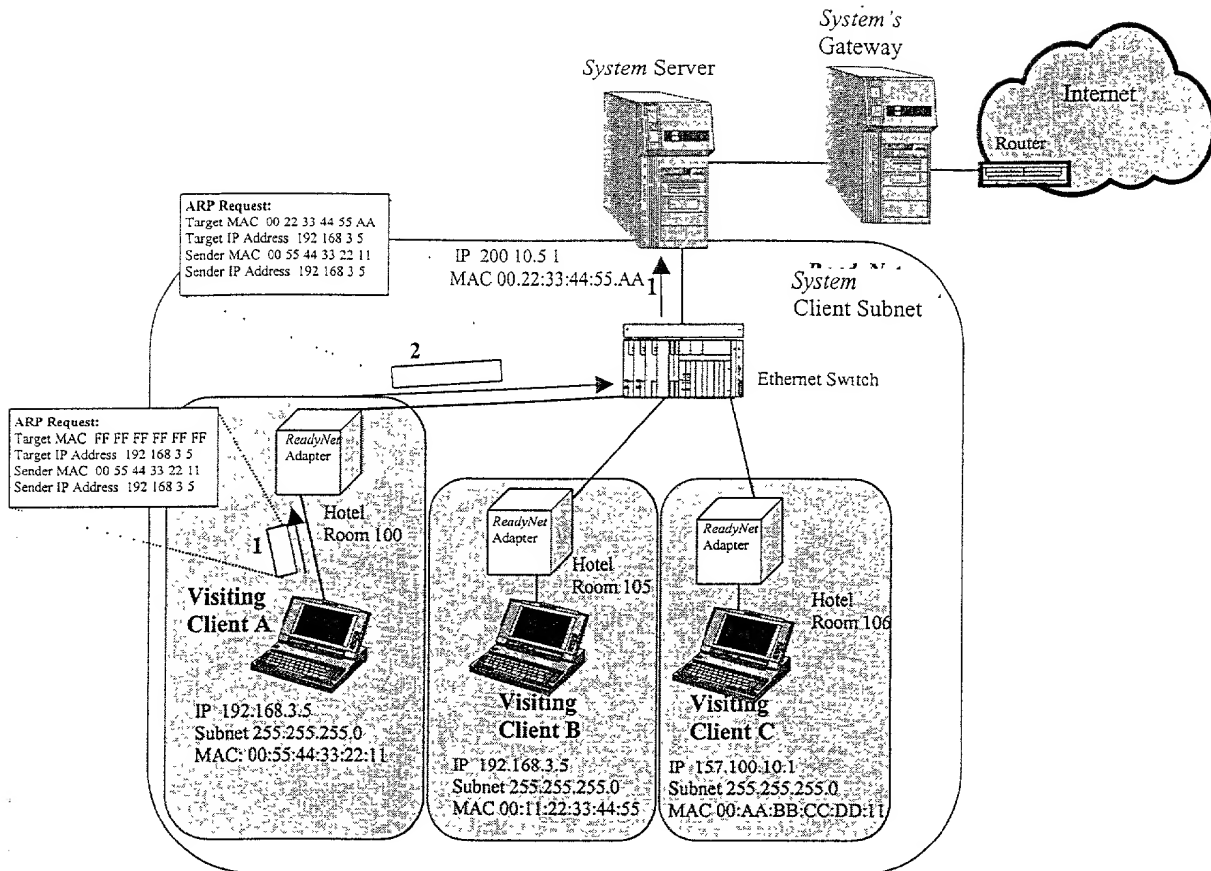


Figure 19

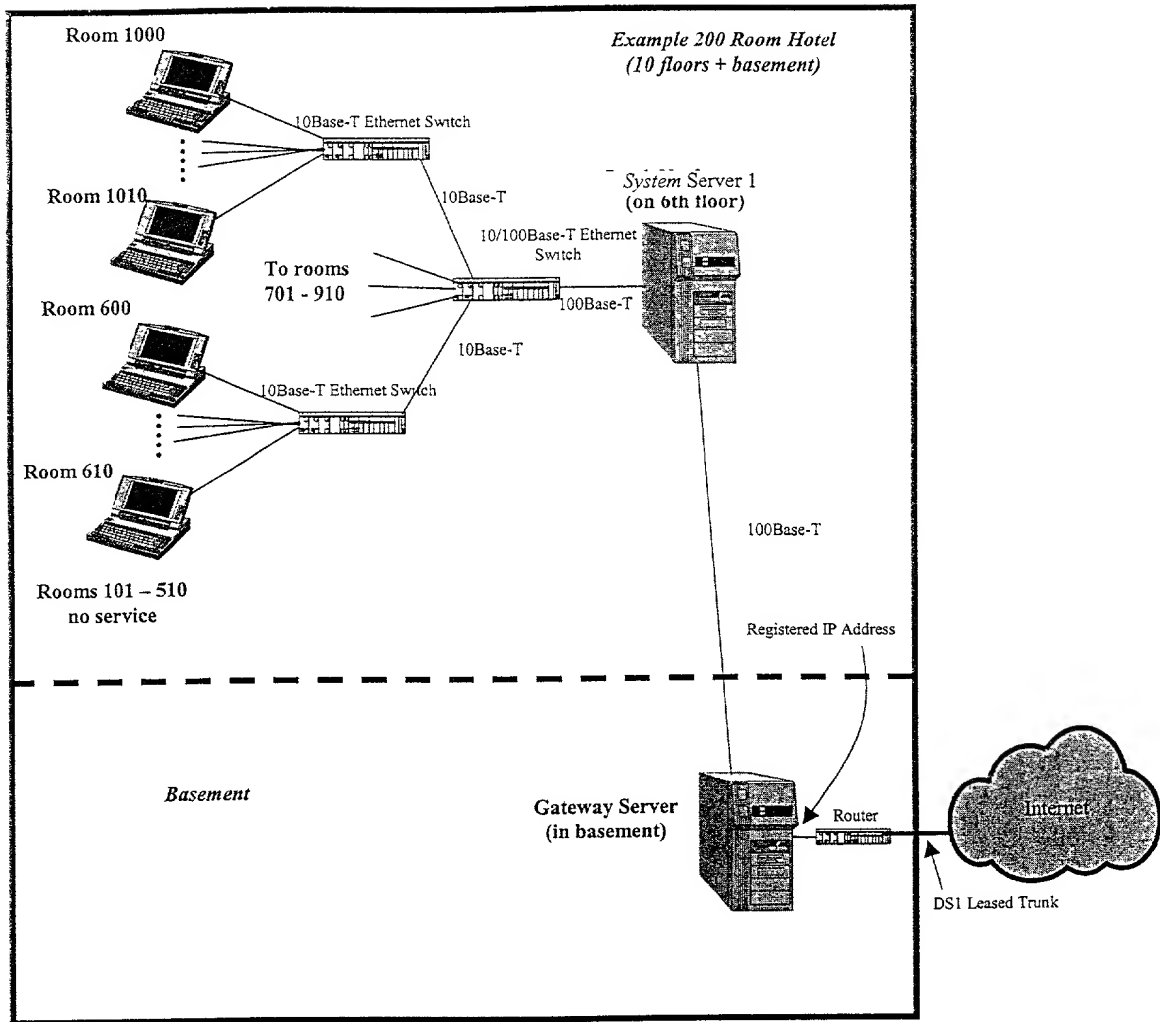


Figure 20

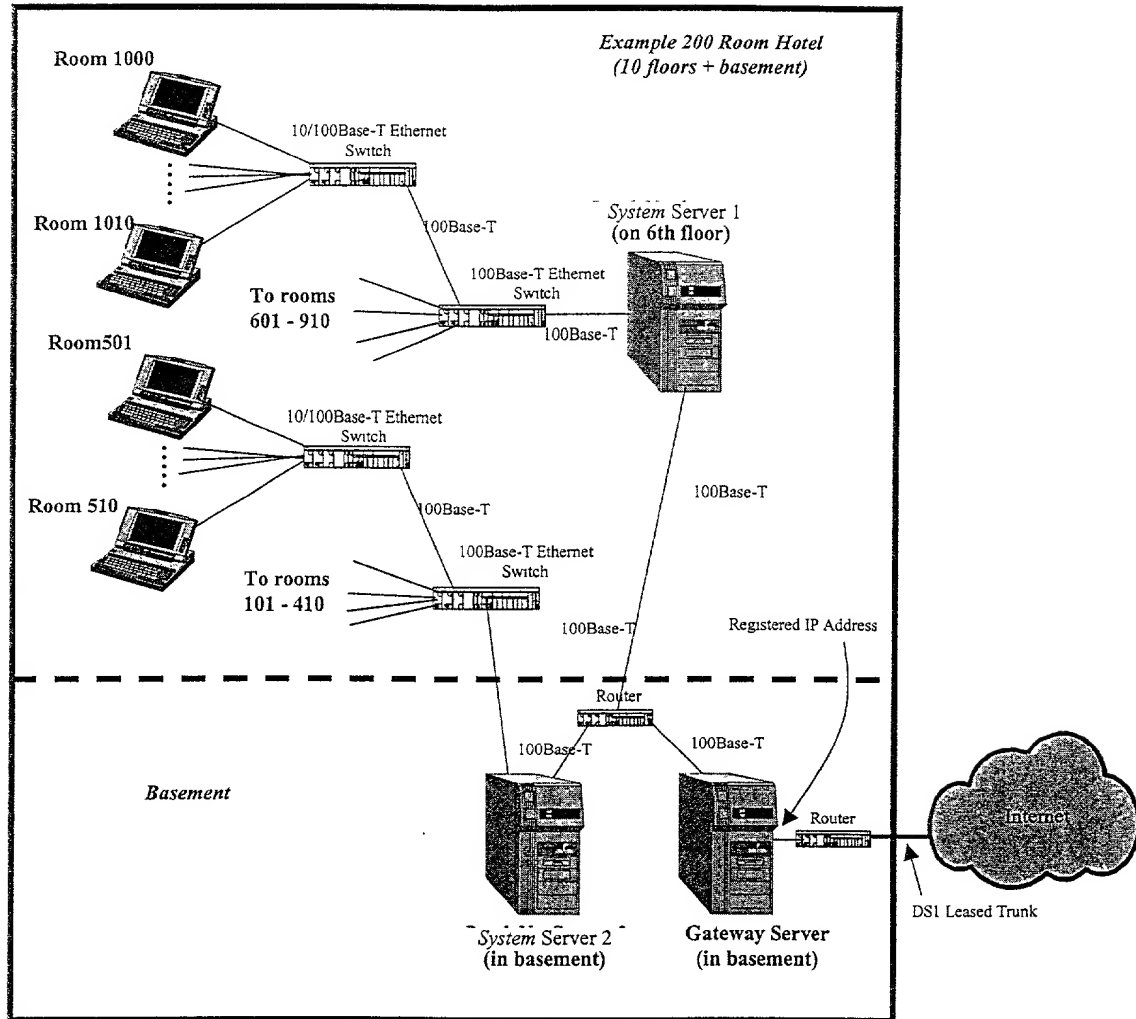


Figure 21

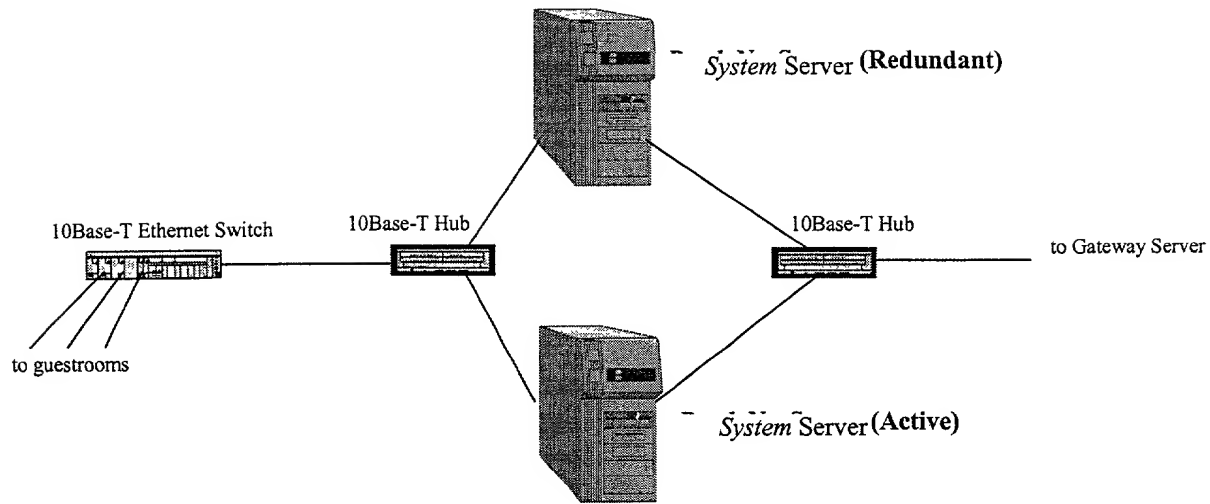


Figure 22

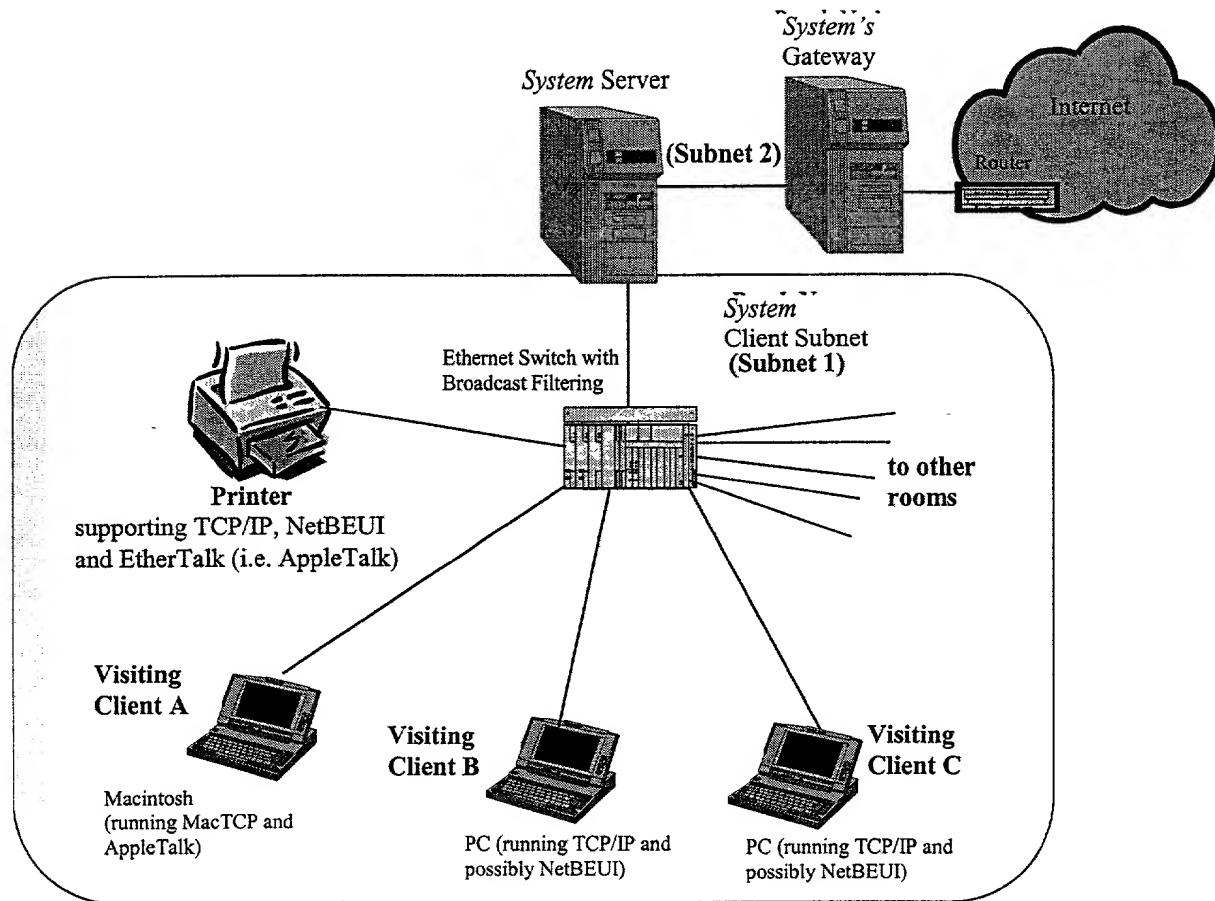


Figure 23

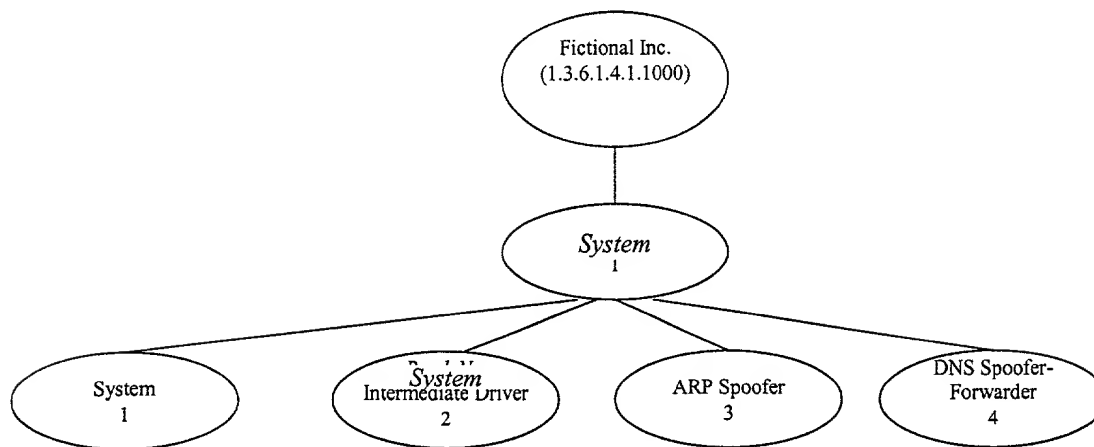


Figure 24

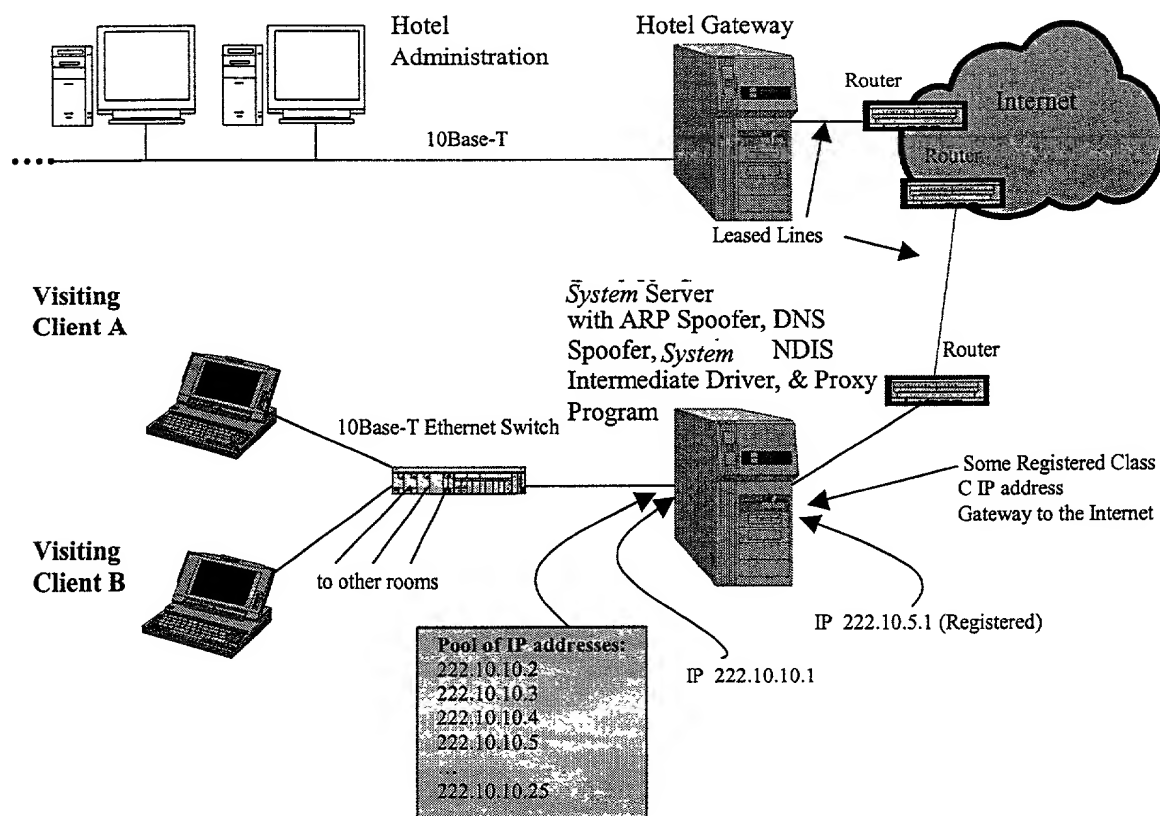


Figure 25

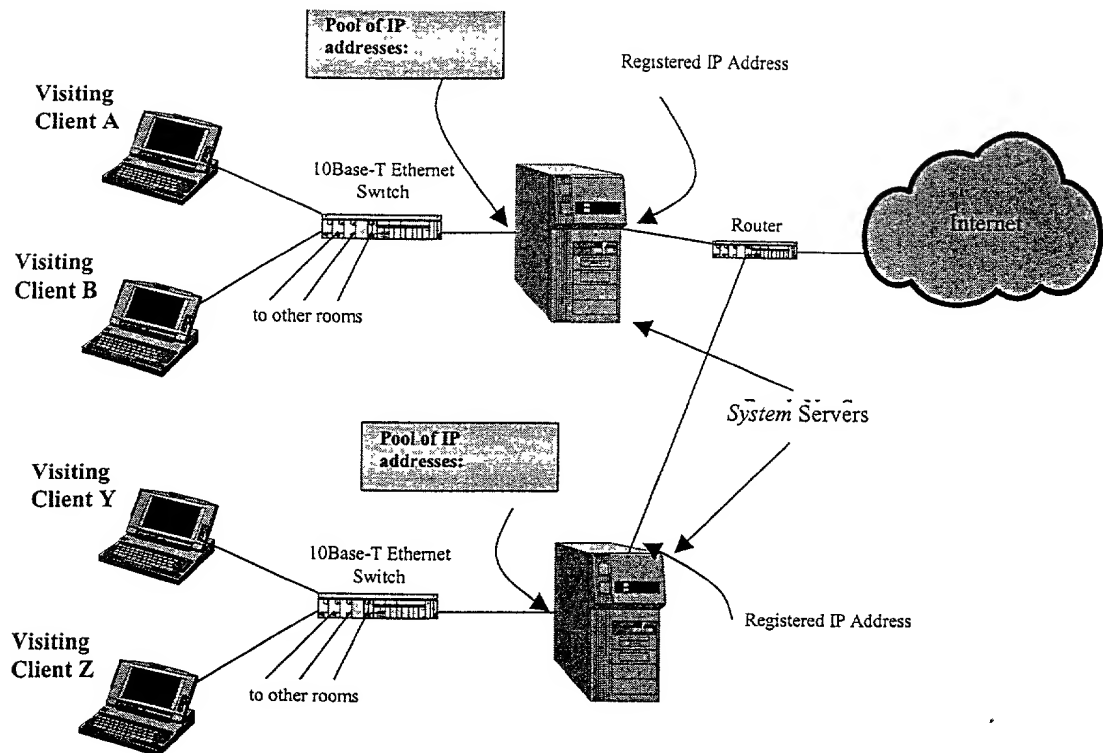


Figure 26

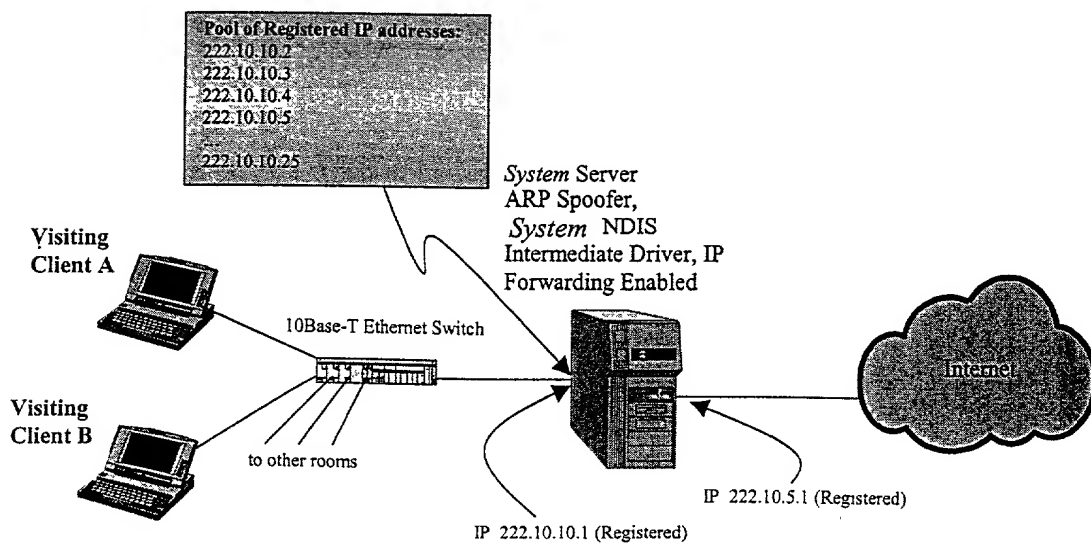


Figure 27

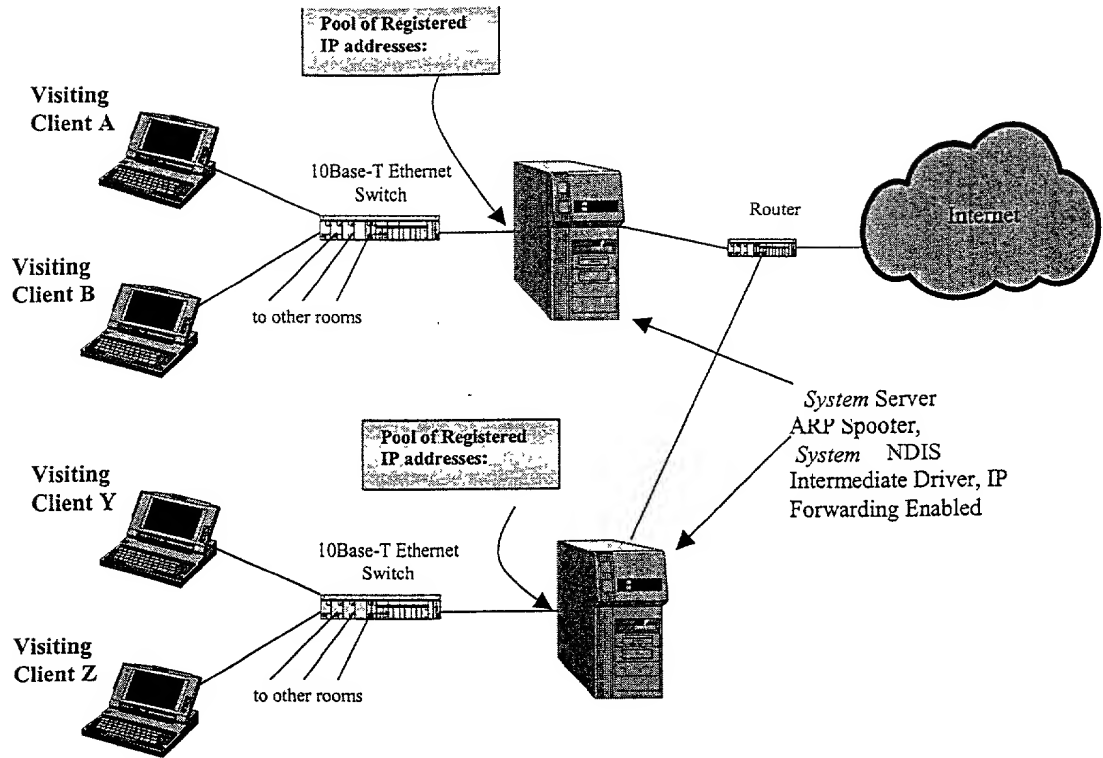


Figure 28

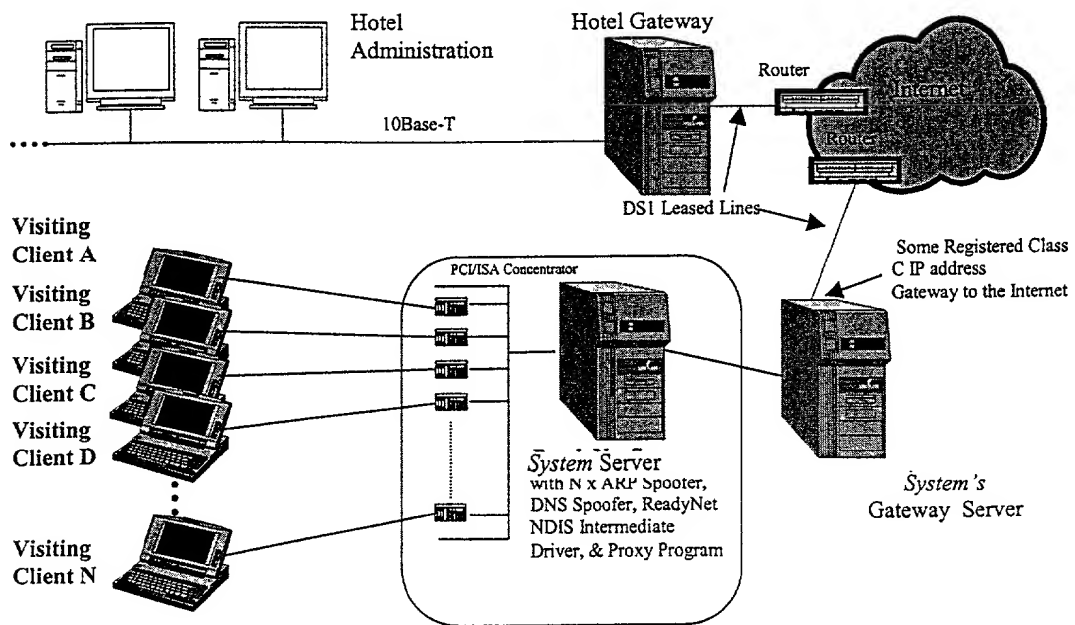


Figure 29

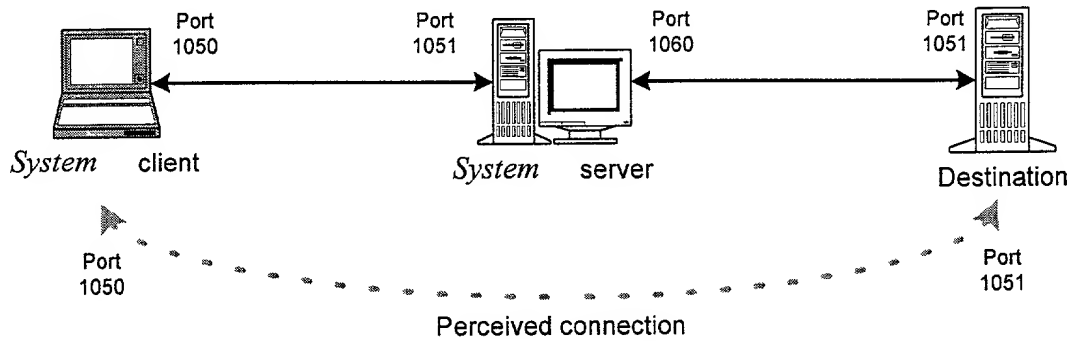


Figure 30

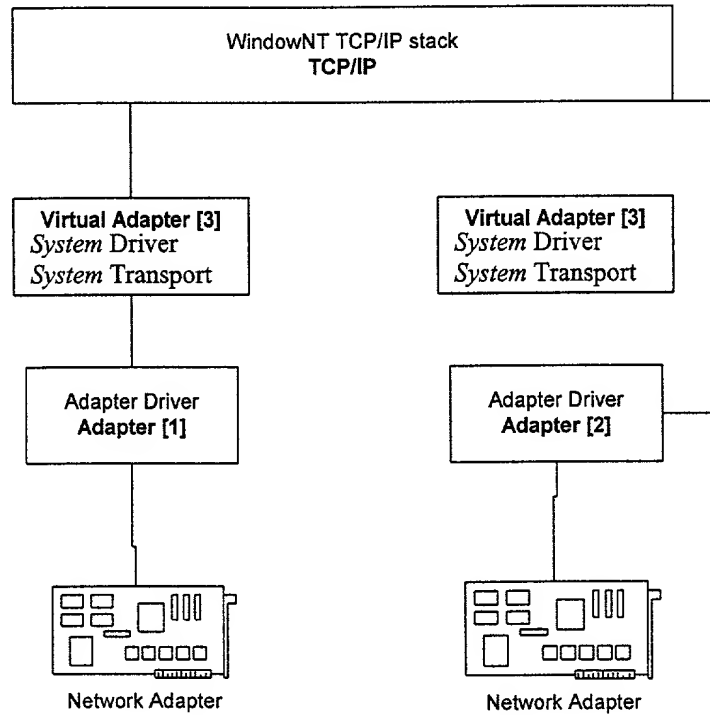


Figure 31